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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/548,316	09/07/2005	Yusuke Hirota	125290	6118
25944	7590	12/11/2007		
OLIFF & BERRIDGE, PLC P.O. BOX 320850 ALEXANDRIA, VA 22320-4850			EXAMINER HURLEY, SHAUN R	
			ART UNIT	PAPER NUMBER
			3765	
			MAIL DATE	DELIVERY MODE
			12/11/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

MR

**Office Action Summary**

Application No.

10/548,316

Applicant(s)

HIROTA ET AL.

Examiner

Shaun R. Hurley

Art Unit

3765

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 and 22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 29 October 2007 has been entered.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-9 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Settle (6330786) in view of Sandor et al (5597649).

Settle teaches a woven fabric having warp and weft yarns or knitted fabric (Column 2, lines 1-9) for clothes comprising a yarn of a known form comprising polyamide (Column 3, line 46) and silk (Column 3, line 38) in a state of mutual contact, by spinning, plying, or other suitable structures (Figures 2, 3). While Settle essentially teaches the invention as described, he fails to specifically teach the use of titanium oxide in an amount of 0.01 - 5.0% by weight. Sandor teaches that is well known to utilize titanium oxide in nylon fibers in such an amount. It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to utilize titanium oxide as taught by Sandor, so as to deluster the yarn of Settle, making it more

natural in appearance while also providing a degree of cut resistance to the yarn, expanding its capabilities. The ordinarily skilled artisan would appreciate the fact that delustering makes synthetic materials appear more natural, as well as appreciated the additional environments the yarn could be used in, and would have known to do such.

In regards to light resistance tests of Claim 1, and properties after a year of Claim 22, such results are inherent of the properties and structure of the product, all of which the combination as detailed above teaches. In other words, the combination as detailed above would behave exactly as Applicant's claimed invention, since the materials are identical as claimed, and the structure is identical as claimed. Identical products will behave identically.

#### ***Response to Arguments***

4. Applicant's arguments filed 29 October 2007 have been fully considered but they are not persuasive.

Applicant argues in paragraph 4 that "Settle only disclosed a yarn comprising buffalo hair and a single fiber...Settle does not teach a fiber [yarn] that contains polyamide and silk". Examiner strongly disagrees, and directs Applicant to Column 3, lines 33-35 which specifically state "In a preferred embodiment, however, the raked and dried buffalo hair is first blended by machine with one or more other fibers if desired". As such, Settle absolutely teaches a yarn which contains polyamide and silk.

Applicant then argues in paragraph 6 that Sandor does not teach the well known use of titanium oxide in nylon fibers. First of all, Applicant does not seem to understand the materials in question. Applicant says that Sandor teaches polyamides as high modulus fibers. This is absolutely incorrect. What Sandor actually teaches are aramids. Sandor does NOT teach all

polyamides. Thus, Applicant's assumption that since polyamide is taught as the high modulus fiber, it cannot be taught as the particle filled fiber is erroneous. Second, if Applicant will please note column 3, line 15, he will see that Sandor most certainly teaches the particle filled fibers preferred are "nylon 6 and nylon 66". In regards to the percentage of filler used, see column 4, lines 1-11. It is Examiner's informed position that Sandor absolutely teaches nylon. Further, Sandor absolutely teaches titanium oxide for use in said nylon.

Examiner makes note that Applicant has elected to argue whether the prior teaches the materials as claimed. Applicant has not, however, argued against Examiner's reasoning for the combination as set forth in the previous rejection. Thus Examiner has no arguments to respond to, and has assumed agreement on the part of Applicant.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shaun R. Hurley whose telephone number is (571) 272-4986. The examiner can normally be reached on Mon - Fri, 8:00 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Welch can be reached on (571) 272-4996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Shaun R Hurley/  
Primary Examiner  
Art Unit 3765

SRH  
07 December 2007